

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

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## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) 10-06-2005

Applicant's or agent's file reference

304853WO/PRS

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/IB 2004/004388

International filing date (day/month/year)

21-12-2004

Priority date (day/month/year)

24-12-2003

International Patent Classification (IPC) or both national classification and IPC

G06F 3/033, H03K 17/968

Applicant

Nokia Corporation et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further opinions, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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Box No. I	Basis of this opinion
1.	<p>With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.</p> <p><input type="checkbox"/> This opinion has been established on the basis of a translation from the original language into the following language, _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).</p>
2.	<p>With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:</p> <p>a. type of material</p> <p><input type="checkbox"/> a sequence listing</p> <p><input type="checkbox"/> table(s) related to the sequence listing</p> <p>b. format of material</p> <p><input type="checkbox"/> in written format</p> <p><input type="checkbox"/> in computer readable form</p> <p>c. time of filing/furnishing</p> <p><input type="checkbox"/> contained in the international application as filed.</p> <p><input type="checkbox"/> filed together with the international application in computer readable form.</p> <p><input type="checkbox"/> furnished subsequently to this Authority for the purposes of search.</p>
3.	<p><input type="checkbox"/> In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.</p>
4.	<p>Additional comments:</p>

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Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The question whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☒ claims Nos. 24 - 30

because:

☐ the said international application, or the said claims Nos. \_\_\_\_\_  
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. \_\_\_\_\_  
are so unclear that no meaningful opinion could be formed (*specify*):

☐ The claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported  
by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 24 - 30

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of  
the Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not  
comply with the technical requirements provided for in the Annex C-bis of the Administrative Instructions.

☐ See Supplemental Box for further details.

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**Box No. V** Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

**1. Statement**

Novelty (N)	Claims	9-11, 13-14, 16-17, 20-23	YES
	Claims	1-8, 12, 15, 18-19, 31-36	NO
Inventive step (IS)	Claims		YES
	Claims	1-23, 31-36	NO
Industrial applicability (IA)	Claims	1-23, 31-36	YES
	Claims		NO

**2. Citations and explanations:**

Reference is made to the following documents:

D1: US 4254333 A  
D2: DE 3306941 A1

D1 relates to an optoelectronic circuit element, e.g. a switching device, comprising at least one radiation-emitting element (LED) 1, a radiation-propagating unit 5 and at least one radiation-sensitive element (PT) 3. The LED and PT are arranged such as that the radiation from the LED is received by the PT after propagating with total internal reflection in the radiation-propagating unit. If the propagating unit is contacted by an actuating body, e.g. a finger, between the LED and PT, some of the radiation is refracted out of the propagating unit. This loss in radiation is registered in the PT as an actuation of the switch.

D2 also refers to an optoelectronic device like that in D1. In figure 2 is shown that a plurality of devices can be arranged in a grid so the position of a contact can be indicated.

The light signal arrangement used as an analogue navigation device in claim 1 is known from both D1 and D2. The use of the light signal arrangement as an analogue navigation device can be derived from D1, column 9, line 28 to line 41 and from figure 2 in D2. In D1, column 9, line 15 to line 19 is stated that a soft rubber body can be used as an actuator

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: BOX V

in stead of a finger.

Thus, the invention according to claims 1-8, 12, 15, 18-19 and 31-36 is known from D1 and/or D2.

Claims 9-11, 13-14, 16-17 and 20-22 are only showing details which are considered obvious for a person skilled in the art.

Therefore, the invention according to claims 9-11, 13-14, 16-17 and 20-22 is considered to lack inventive step.

Claim 23 should probably refer to "An analogue navigation device..." in stead of "A handheld electronic device...". If so, it is known from D1, if not, see comment on claims 25-29.

A claim that only refers to a reference to figures as in claims 24 and 30 is not allowed.

An independent claim shall fully describe the invention. Claim 25 is not written in such a manner that it can be allowed. Therefore, claims 25-29 is not searched.

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Box No. VII Certain defects in the international application

The following defects in the form or content of the international application have been noted:

Claim 23 should probably refer to "An analogue navigation device..." in stead of "A handheld electronic device...".

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**Box No. VIII** Certain observations on the international application

The following observations on the clarity of the claims, description, and drawing or on the question whether the claim are fully supported by the description, are made:

Claims 24 and 30 are not allowed because they only refer to a reference to the figures.

Claims 25-29 is not searched because an independent claim shall fully describe the invention. Claim 25 is not written in such a manner and cannot be allowed.